DOCUMENT RESUME

ED 046 079 EA 003 200

AUTHOR	Clinchy, Evans
TITLE	Joint Occupancy: Profiles of Significant Schools.
INSTITUTION	Educational Facilities Labs., Inc., New York, N.Y.
PUB DATE	Jun 70
NOTE	37p.
AVAILABLE FROM	Educational Facilities Laboratories, Inc., 477 Madison Avenue, New York, New York 10022 (Free)
EDRS PRICE	EDRS Price MF-$0.65 HC-$3.29
DESCRIPTORS	Construction Costs, Cultural Factors, Housing Patterns, *Land Use, School Community Relationship, School Construction, *School Design, Shared Services, *Tax Effort, Tax Support, Urban Culture, *Urban Environment, Urban Renewal

ABSTRACT

The concept of schools that pay for themselves by sharing facilities with other occupants is known variously as joint occupancy or mixed or multiple use of land and buildings. A financial saving is the obvious advantage of combining schools with housing, commercial space (retail or office), or community services and offices. In addition, joint occupancy creates new kinds of urban environments that blend schools with communities composed of people of varied ethnic groups and income levels. This document illustrates graphically 10 schools utilizing joint occupancy; some schools are already in use, others are still in the planning stage. (Photographs may reproduce poorly.) (Author/MLF)

Educational Facilities Laboratories, Inc. is a nonprofit corporation established by the Ford Foundation to help schools and colleges in the United States and Canada with their physical problems by the encouragement of research and experimentation and the dissemination of knowledge regarding educational facilities.

EFL

Board of Directors

Milton C. Mumford, Chairman	Chairman of the Board, Lever Brothers Company
Alvin C. Eurich, Vice Chairman	President, Academy for Educational Development, Inc.
Clay P. Bedford	President, Kaiser Aerospace & Electronics
James C. Downs, Jr.	Chairman of the Board Real Estate Research Corporation
Henry Dreyfuss	Corporate Advisor
Morris Duane	Attorney, Duane, Morris and Heckscher
Edwin D. Etherington	Former President, Wesleyan University
Harold B. Gores	President, Educational Facilities Laboratories
J. E. Jonsson	Honorary Chairman of the Board Texas Instruments, Inc.
Philip M. Klutznick	Chairman of the Board Urban Investment and Development Company
Howard S. Turner	President, Turner Construction Company
Benjamin C. Willis	Superintendent of Schools, Broward County, Fla.

Officers

Harold B. Gores	President
Jonathan King	Vice President and Treasurer
Alan C. Green	Secretary

Staff

Gaila Coughlin	Copy Editor
Robert M. Dillon, AIA	Consultant
Ben E. Graves	Consultant
Peter Green	Editor
Catherine Slade	Librarian
Lillian Sloves	Publications Associate
Danae Voltos	Information Associate
Mary C. Webb	Assistant Treasurer
Ruth Weinstock	Research Associate

ED046079

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

Joint Occupancy: Profiles of Significant Schools

A report from
Educational Facilities
Laboratories
by Evans Clinchy

EA 003 200

Library of Congress Catalog No. 71-128404
First Printing: June 1970
Additional copies are available from EFL,
477 Madison Avenue, New York, N.Y. 10022

"PERMISSION TO REPRODUCE THIS COPYRIGHTED MATERIAL HAS BEEN GRANTED BY
Allen C Green
TO ERIC AND ORGANIZATIONS OPERATING UNDER AGREEMENTS WITH THE U.S. OFFICE OF EDUCATION. FURTHER REPRODUCTION OUTSIDE THE ERIC SYSTEM REQUIRES PERMISSION OF THE COPYRIGHT OWNER."

Introduction

There is a major crisis in school building across the country. High construction costs, difficult and expensive credit, and even the loss of revenue when school sites are removed from the tax rolls, all contribute to the taxpayers' unwillingness to pay for new schools.

In response, ingenious school administrators are exploring some interesting new ways of financing school construction. For instance:

New York City will get 23 new schools during the next five years, all of them paid for in full by revenue from commercial buildings built above the schools.

A private school in Philadelphia has almost doubled its space. It is paying for the new facilities by leasing part of the site for an office building.

In Chicago, a real estate developer recently built a $750,000 school in a new housing complex to attract tenants. He then leased the school to the City school system.

Boston, Mass., and Pontiac, Mich., are creating new kinds of urban environments that link elementary schools into their communities in an attempt to end the traditional isolation of schools from the rest of urban life.

The Concept of Joint Occupancy

School buildings that pay for themselves, privately built public schools, schools linked into an urban environment all comprise a concept known variously as joint occupancy, mixed use, or multiple use of land and buildings. The concept includes combining schools with housing, commercial space (retail or office), community services and facilities, other civic agencies such as health units and municipal offices, recreation facilities, parking garages, and so on. Various combinations of these create environments that are in effect small cities or towns that could almost act as independent communities but which are still linked to their surrounding cities.

The notion of joint occupancy is not new. One of the oldest and most picturesque examples of joint occupancy, and a public-private mixture to boot, is Boston's famed Fanueil Hall. Built in 1761, it was designed to house public meetings on the upper floor while butchers carved up carcases on the floor below.

Even the idea of combining schools with other public functions is not new. The school that claims to be the first truly public high school in America, Boston's English High School, began its life in 1821 by sharing a building with the Town Watch and the Hero Fire Engine Company.

Today, few office or apartment buildings are constructed without commercial space built into them. Indeed, the idea of the "complex" is popular in any section of a city where land costs are exorbitant and many users compete for the available ground. Combinations of housing, motels, office space, stores, and recreation facilities are springing up all over the country.

Much rarer, however, are combinations of private uses with public facilities such as schools, police or fire stations, or even city offices. Since schools are usually the largest part of a municipal building program, they need to be the common denominator in joint-occupancy programs if significant savings are to be made.

Reasons for Joint Occupancy

The first reason for developing and extending the idea of joint occupancy is simple, direct, and obvious—money.

Urban land is getting scarce and therefore increasingly expensive, which simply means that more and more people want to use urban space for more and more things. Cities may be in trouble, but they are also booming. And, as competition and cost increase, it becomes increasingly difficult to find city sites that can be put aside strictly for educational purposes. Many other agencies need the land for their own

purposes, including such equally valid purposes as low-income housing and recreation.

Compounding the land shortage, most cities face a frightening fiscal crisis due to a dwindling property tax base. In order to survive, cities must increase, or at least maintain, their tax base of revenue-producing properties. In the City of Boston, for instance, about 50 percent of the available land in the city is already occupied by public or private nonprofit, and therefore tax-exempt, buildings. Every time a new public school is erected on its own land, the tax base of the city is either decreased or a possible piece of revenue is lost for the life of that school building.

In many communities resentment is growing against high property taxes, and taxpayers are looking closely at the cost of school buildings. In many cases communities reject bond issues for new schools because debt service for such bonds raises the tax rate.

If a way exists to build schools while at the same time expanding the tax base, taxpayers will vigorously exploit it.

In addition to the financial problems associated with land, local communities are becoming less willing to sacrifice large pieces of land which could be used for housing and assign it to new schools. In the past, cities with slum clearance and urban renewal programs have cleared large tracts of land for a variety of purposes, new schools among them. This procedure invariably meant relocating large numbers of poor people to other areas which either were already or quickly became slums.

Now that many city planners are beginning to understand this, they are attempting an economic integration of housing. Although some whites and blacks strive for racial integration, simply to place poor whites and poor blacks together in an integrated low-income ghetto does little to improve the quality of urban life.

A much more realistic goal is to create communities in which people of varied ethnic backgrounds and income levels exist in some kind of cohesive accommodation. Whether the idea is simple economic self-interest, the preservation of housing, or building new kinds of urban communities, the principle is roughly the same; how to use scarce land to the greatest public and private advantage.

In almost all cases the solution is the combination of uses, the stacking of different spaces and functions, the use of air rights over small pieces of ground space. We cannot assume that land for schools can be put aside in perpetuity and never contribute to the fiscal health of a city beyond the contribution of educating children. To survive, schools must contribute significantly to the physical as well as the human renewal of cities.

Joint Occupancy: Shared Sites

The simplest way for two or more parties to form a joint occupancy is for them to share a building or to occupy separate buildings that share a site. Both types of joint occupancy have their advantages and disadvantages, and no general assessment of merit can be made. Obviously the circumstances of an individual project will influence the decisions about sharing a building or sharing a site. Shared sites imply separate buildings that may or may not be related in programs or functions but invariably use the income from one building to help finance the other.

Friends Select School Philadelphia, Pa.

Like many downtown independent schools, Friends Select in Philadelphia was faced a few years ago with a desperate need for modern facilities. Founded in 1689 by William Penn, the school has been located since 1885 on three acres, across the street from City Hall. Obsolete facilities caused the school to question whether it should spread out in the suburbs.

This was no easy decision for a school with the history and educational aims of Friends Select. Besides the desire to remain an inner-city school, there was also the question of money. The three acres owned by the school were valued at $4,000,000, a sum large enough to buy land for a suburban campus but far from enough to construct all the facilities needed. On the other hand, if the school decided to remain on its city site, it would still have had to raise funds for a new building.

While the governing board of the school was debating this question, the headmaster, G. Laurence Blauvelt, recalled that small store owners often survived by living over their store and thus saving money on rent.

So he proposed to the board that Friends Select investigate the possibility

of building a new school on its present site in conjunction with a private building that would produce enough income to pay the cost of new school facilities.

The school decided it would become a landlord and lease one of its three acres for commercial development. After protracted negotiations, Pennwalt, a large chemical firm with its headquarters in Philadelphia, agreed to take a 99-year lease on one acre of the school's land and erect a 20-story office building with about 525,000 sq ft of space. Pennwalt occupies 6 floors and rents the rest to other companies.

This arrangement will produce for the school a ground rent of $125,000 plus 14 cents per sq ft for office space. These rents should bring the school an annual income of about $200,000 which is more than enough to cover the $175,000 interest and debt retirement costs on the $3.2 million school facilities occupying the other two acres of land.

In its old building, Friends Select had about 65,000 sq ft of space, most of it antiquated. In the new climate-controlled facilities, the school has about 120,000 sq ft, including a large auditorium, a swimming pool, and a gymnasium. Since the school has shrunk its site from three to two acres, outdoor playspace is now located on the roof which is covered with artificial turf.

The Friends Select joint-occupancy project was designed by the architectural firm, Kneedler, Mirick, Zantzinger, Pearson, Ilvonen and Batcheler of Philadelphia. It gives every appearance of being a single structure, but the two buildings are 18 in. apart, and each occupies its own piece of the site. There is neither a physical connection nor a programmatic relationship between the two parts of this project. It is, however, from the financial point of view, a big step forward for an inner-city private school.

Students enter and leave Friends Select School on a busy Philadelphia street. By leasing part of its site to commerce, the school was able to finance a new building with most of the amenities of a suburban site without leaving the city.

Joint Occupancy: Shared Buildings

Mother and daughter houses advertised in the real estate section of city newspapers represent the basic shared building aspect of joint occupancy. A married daughter lives upstairs in a self-contained space with her own entrance while her parents live independently at ground level where they don't have to climb stairs. Schools can function in the same way except on a larger scale with a few floors of school on the lower stories and a tower of housing or commerce isolated above it.

New York City Educational Construction Fund

Although New York City is usually slow to make innovations in educational facilities, it rose eagerly at the chance to reduce the cost of building schools with income derived from the private part of joint-occupancy projects. Twenty-one projects are in planning and two in construction.

The legislation for building joint-occupancy projects was created by the State in 1966 when it established a public authority, called the New York City Educational Construction Fund. The idea of the Fund was conceived by Lloyd K. Garrison, a former president of the New York City Board of Education. For this reason, the Fund and the law that set it up are often referred to as "the Garrison Law". It is governed by a board of three public trustees comprising the president and chancellor of the Board of Education and an appointee of the mayor.

The Fund owes it success to two extraordinary powers:

It can issue its own bonds outside the City's debt limit to cover the construction costs of a project and can retire those bonds out of the income it receives from the private portions of the project for the lease of air rights and payments in lieu of taxes equal to what the structure would normally pay the City. In most cases these schools will be built at either little or no cost to the City. And after the bonds have been paid off, the school and land are deeded back to the City, and all further income from the air rights reverts to the City.

The Fund also has the power to plan and supervise the entire project, subject to the approval of various City agencies, including the Board of Education.

The Fund selects the developer, and together they select the architect. The developer is responsible for constructing both the school and non-school parts. There is no public bidding on the contract as a whole. However, the major subcontractors—plumbing, heating, ventilating and air conditioning, electrical—are selected by public bid from a list of qualified subcontractors. The winning bidders are then made responsible to the general contractor or developer, thus retaining the major advantage of building privately under a single responsible agent to assure the timely and satisfactory completion of the work.

The concept of self-supporting schools, of course, works best where the private part of joint occupancy produces a respectable income. The best projects for this kind of operation are the same kind of projects that work best in the open real estate market—upper-middle and high-income housing projects and high-rise offices. Projects that have a built-in subsidy, such as low-income housing or public buildings, usually do not produce enough income to help pay off the bonds. But even in these cases, the joint occupancy will produce a net gain in the use of land. A public school and a low-income housing project joined together take up less space and so leave other land available for public use or a private income-producing development.

At May 1, 1970, the Fund has 23 such projects under construction or in planning which will accommodate 22,300 children and represent about $118 million worth of school construction. The private part of these projects amounts to approximately 8,000 new apartments and 1,450,000 sq ft of office space totaling $258 million in investment capital.

The following six schools in New York City share buildings with another institution but are not connected programmatically with their neighbors. Five of them are projects of the New York City Educational Construction Fund, the sixth is a venerable private school venturing into the real estate business.

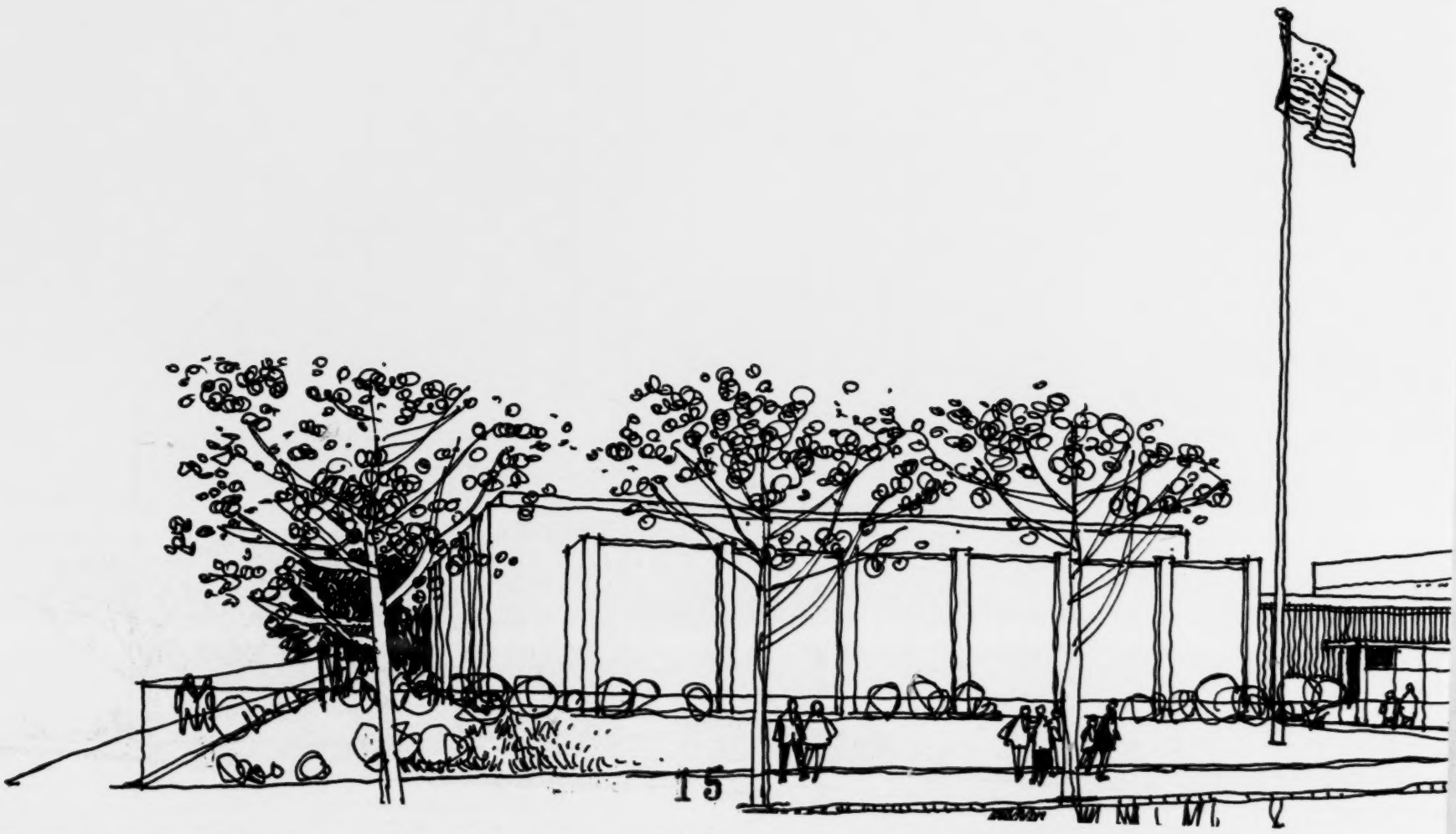
P.S. 99
New York City

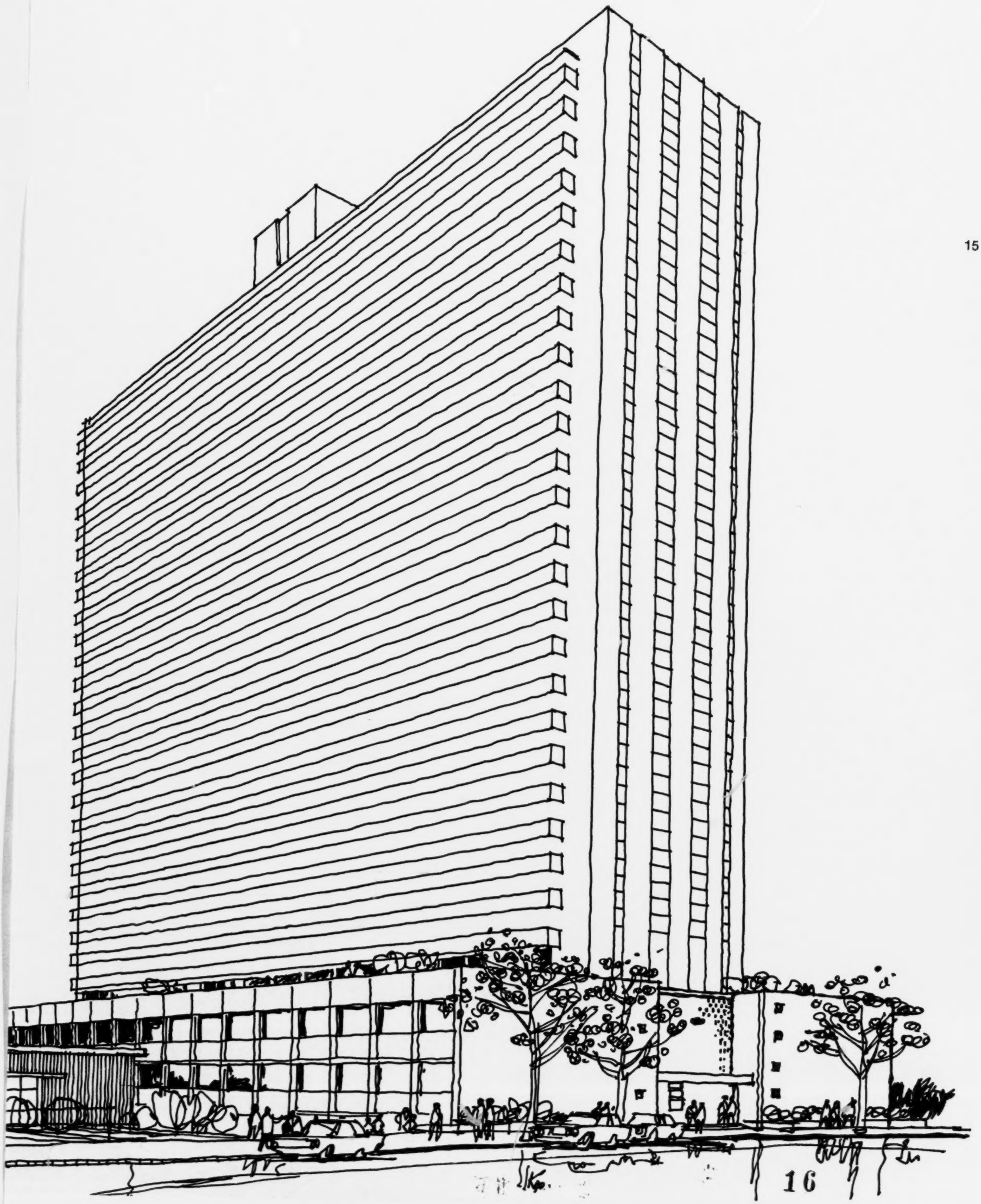
P.S. 99 was built in the Depression when school building money was scarce, so it never had an auditorium or a cafeteria, even though the land for such an addition existed right next to the school. Recently, when parents proposed a cafeteria and an auditorium on this small plot, the City said the project would receive a low priority, which in effect was saying it had no money for such a project.

The parents appealed to the Fund for help. The result will be a new $1 million gym-auditorium-cafeteria-community space addition to the school, with 224 upper-income apartments built above it. The apartment structure is worth $7.5 million and will pay its full share of taxes, which will in turn pay off the cost of the school addition. The plan for the complex includes separate access for the apartment dwellers and school-children, connecting links to the school itself, and provisions for keeping the addition and its facilities open after hours for the use of the community.

P.S. 126
New York City

The first of the Fund's projects (now under construction) will combine an elementary school for 1,200 children with a 400-apartment, middle-income housing project in the Bronx. The single structure will contain P.S. 126, costing $3.5 million, and Highbridge House, costing $10 million. Housing and school each has its own entrances, and the school roof is to be used by the apartment dwellers as recreation and lounging space. Otherwise, the two pieces of the complex have no programmatic relation to each other, except that the children from the housing will attend the school.

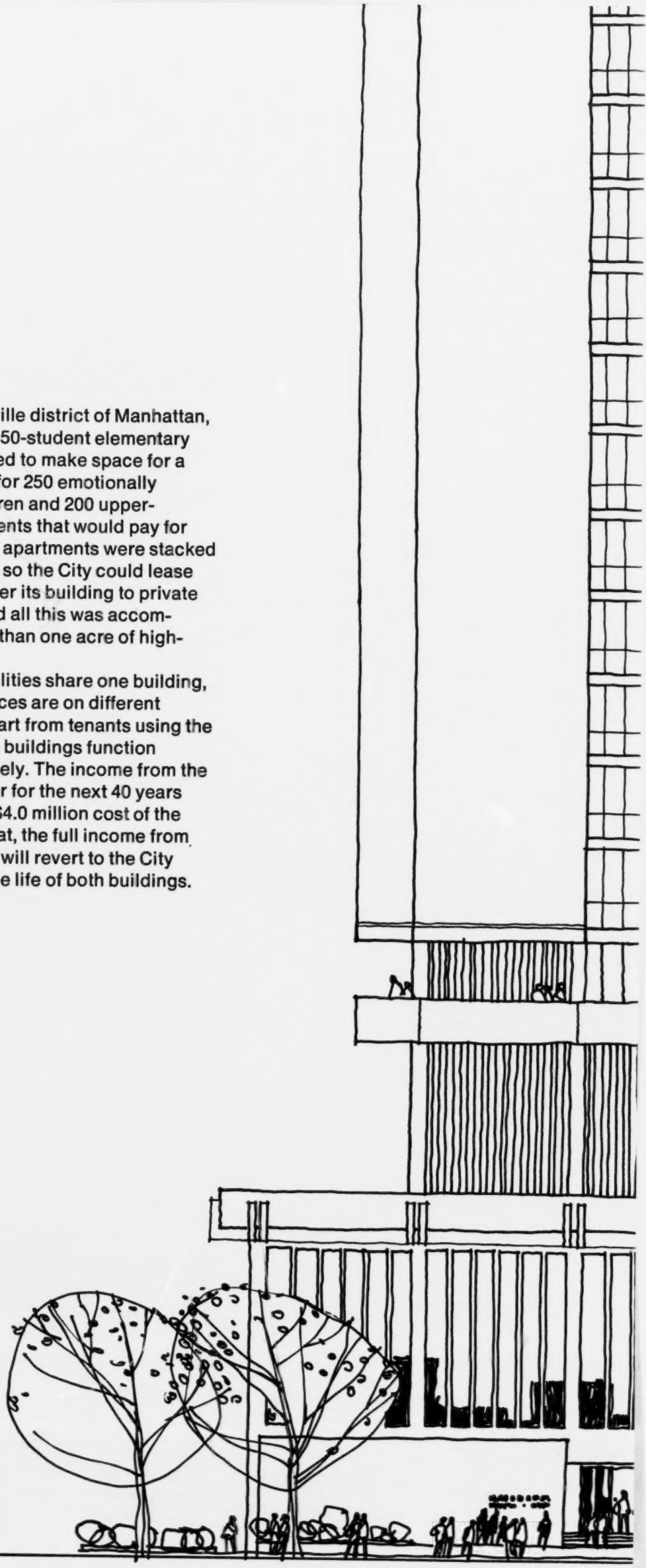


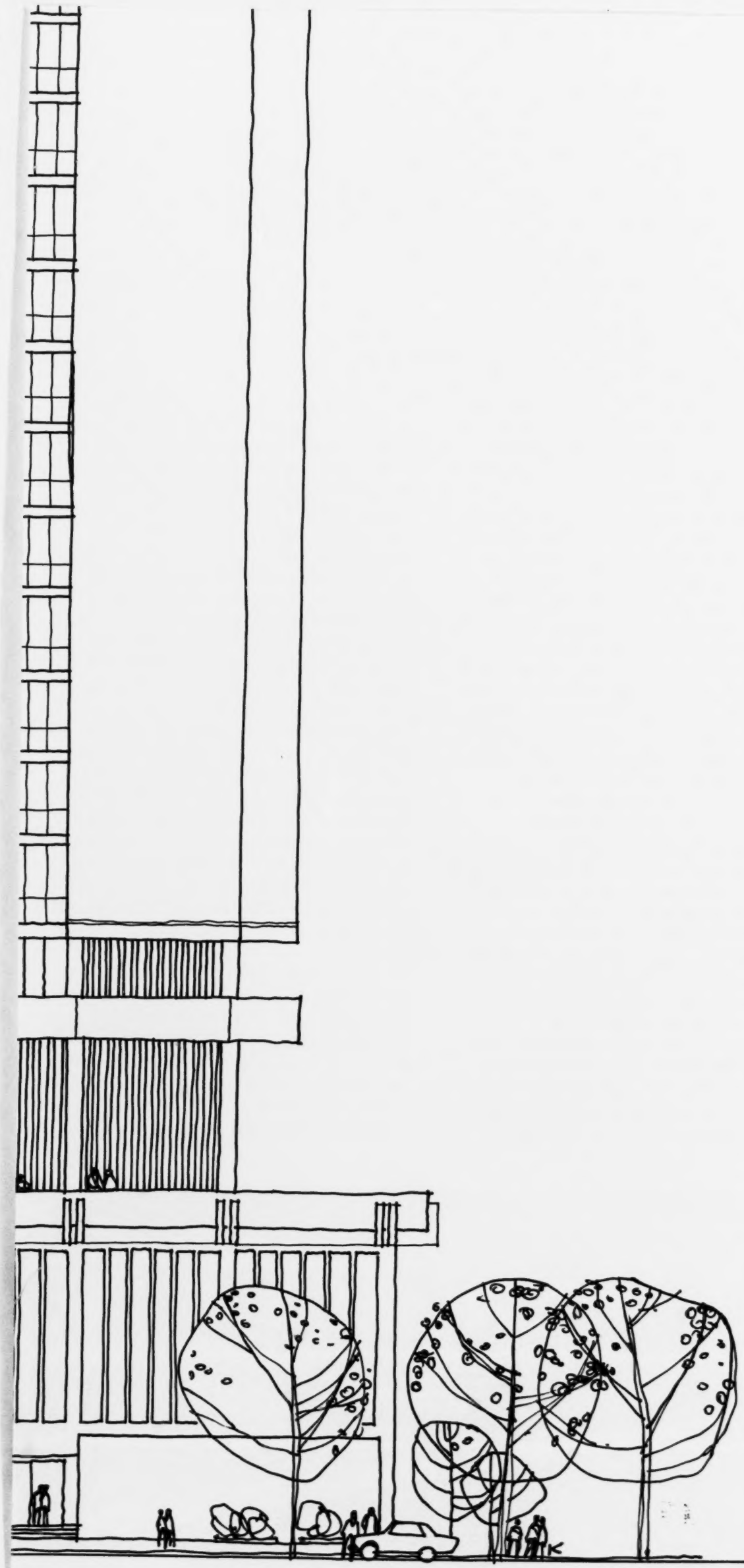


P.S. 169
New York City

In the Yorkville district of Manhattan, a century-old, 150-student elementary school was razed to make space for a special school for 250 emotionally disturbed children and 200 upper-income apartments that would pay for the school. The apartments were stacked over the school so the City could lease the air rights over its building to private developers. And all this was accomplished on less than one acre of high-priced land.

The two facilities share one building, but their entrances are on different streets, and, apart from tenants using the school roof, the buildings function entirely separately. The income from the apartment tower for the next 40 years will pay off the $4.0 million cost of the school. After that, the full income from air rights rental will revert to the City for the rest of the life of both buildings.





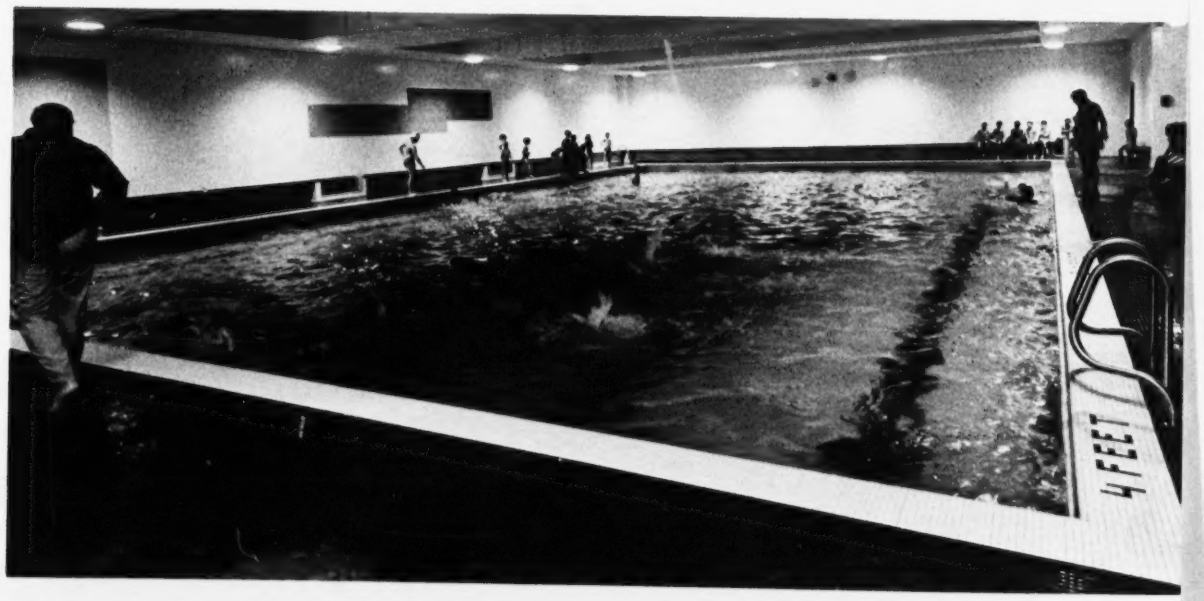
Trinity School New York City

Trinity School, an Episcopal boys school in Manhattan, falls outside the jurisdiction of the NYCECF because it is private, but it shares the problems common to all city schools. Like Friends Select, it had to decide whether to stay in the city or move to the suburbs because its facilities needed to be modernized and expanded if not completely replaced. Although not literally a downtown school, the school was located in an area that after World War II had been going rapidly down the social and economic scale. In the early 1960's, however, the land immediately adjacent to the school was scheduled in an urban renewal plan to be used for mixed middle- and low-income housing. Two parents and the school's headmaster, Richard M. Garten, conceived the idea that Trinity should become the developer of its neighboring housing project and build additional school space underneath the housing. This required long hours of negotiation and legal work, but eventually Trinity Housing Inc. was formed as owner of the land and developer of the housing.

Since the housing was constructed under New York's Mitchell-Lama Act, which limits profits to 6 percent, Trinity will receive only 6 percent of its original investment as a return to help pay for the cost of its new facilities. But it did get at almost "no cost" 30,000 sq ft of land valued at slightly over $1 million. The school was thus able to expand on adjacent land that it would not have been able to afford under normal circumstances.

The combined housing and school was designed by the New York architectural firm of Brown, Guenther, Battaglia and Galvin, which also designed the Highbridge House for the New York City Educational Construction Fund. The school addition, which is basically a four-story structure starting below ground level, houses a new wing for the school's middle and high school grades, including a combined chapel and auditorium, 16 classrooms, 2 swimming pools, a main library, a new kitchen and dining room, a research library, and a gymnasium for the lower grades. The adjacent old buildings will be rehabilitated and used for the elementary grades.

The 25-story apartment tower rising above the new school facilities contains 200 apartments. The required parking for the housing has been located where the school's playing field used to be, but the entire roof of the parking garage is covered with artificial turf and is available as outdoor playspace.



Existing buildings abut new school building which is surmounted by apartment tower. Entrances to new school premises and apartment building are on opposite sides of structure.

Central Commercial High School New York City

For many years, the City of New York and the State of New York have been struggling over the fate of the 71st Regiment Armory, an ancient fortress located in midtown Manhattan.

Although the location makes it a highly desirable site for a high-yield, tax-producing commercial building, the City has a pressing need to replace the existing, dilapidated Central Commercial High School. The two governments finally agreed that the New York City Educational Construction Fund would serve both the public and the private interest by building a new $15 million, 2,500-seat facility for Central Commercial High School and leasing the air rights over the school for a $14 million office tower containing 350,000 sq ft of commercial space. The new complex is now in planning and as soon as the State vacates the Armory (about April in 1971) construction will get under way.

Educators hope to work out arrangements for cooperative programs between the commercial high school and the businesses housed in the office tower. This would give students work experience and training programs conducted in real offices using the latest business techniques. The firms occupying the tower would benefit from a ready-made work force already partially trained in the techniques most needed in their particular business.

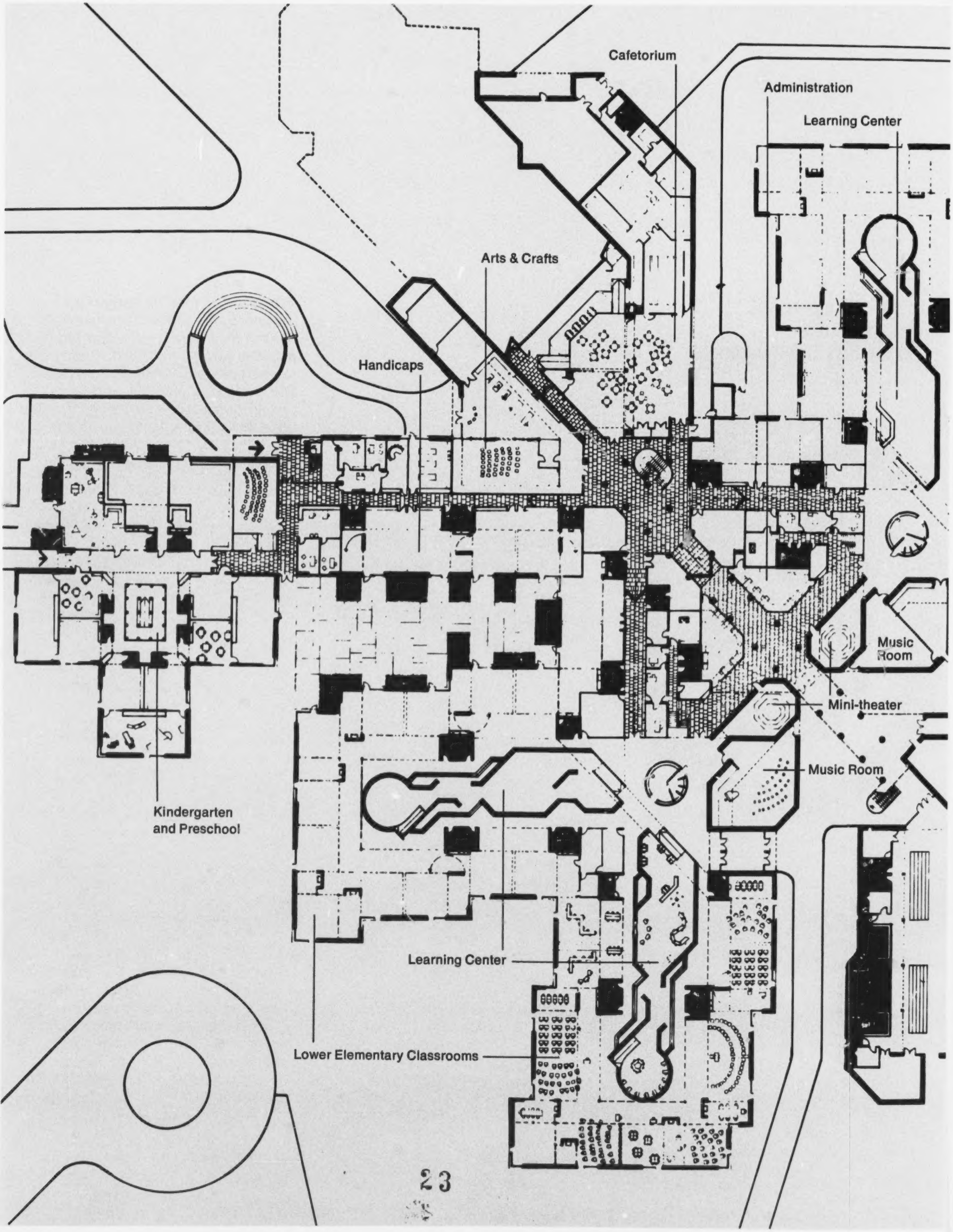
Under the present plans the air rights rental income from the office tower (plus a payment to the Fund in lieu of taxes) will cover the cost of debt service on the school facilities. At the end of the debt period, the City will then continue to receive the air rights and tax revenue as direct contributions to the City treasury.

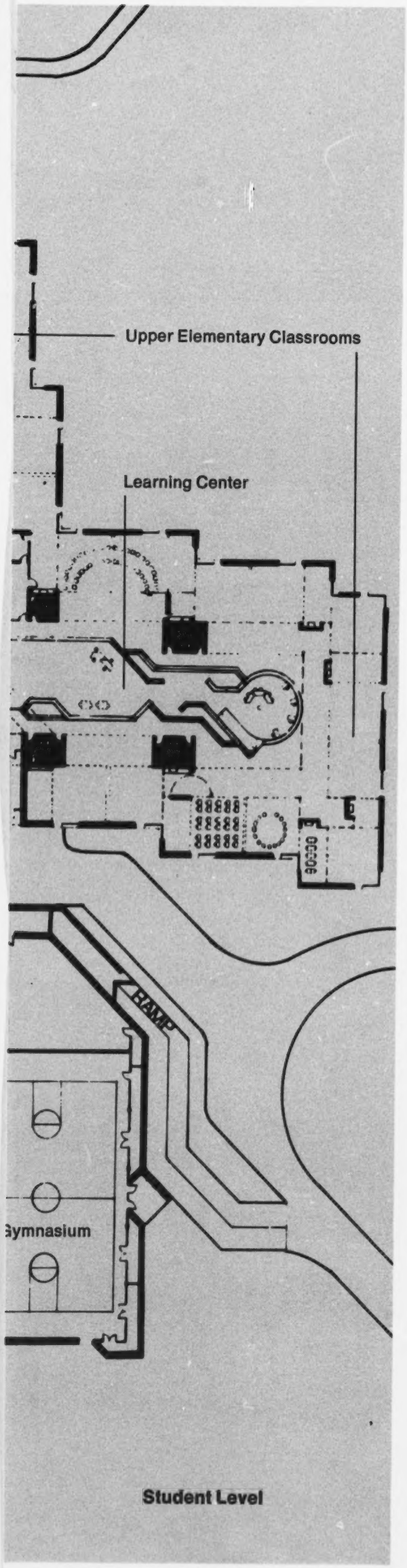
Downtown Commercial High School New York City

Although still in preliminary planning stages, Downtown Commercial High School has all the earmarks of a true public-private complex with functional interactions built in. Its proposed location is an almost triangular 2.3-acre site near the Wall Street district of Manhattan. A 2,500-seat, $16 million high school, and a $30 million office building providing over 1 million sq ft of space are planned for the site. A promenade will link the school with the lower levels of the office structure. One of the purposes of Downtown Commercial will be to provide technically trained office workers for the district. And, it is hoped that commerce will aid in training the students in real places of business with current business techniques and machines.

Joint Occupancy: Linking with the Urban Environment

The definition for a full-fledged joint occupancy is a school combined with another (or several different) enterprises, public or private, with the different parts related both structurally and functionally. In the ideal projects, joint occupancy creates a new environment, a kind of small city with a life of its own but also intimately connected with its neighborhood and the rest of the larger city.


Cafetorium
Administration
Learning Center
Arts & Crafts
Handicaps
Music Room
Mini-theater
Music Room
Kindergarten and Preschool
Learning Center
Lower Elementary Classrooms



Human Resources Center Pontiac, Mich.

The City of Pontiac has combined schooling with other forms of community and cultural services in an attempt to concentrate in one structure many of the human resources of the City.

The Pontiac story began in 1966 when the district decided to replace a decrepit school in an area that was rapidly becoming a black ghetto. As a result of community organizing, a demand was made not only for a new school but for a much broader range of community services than existed at that time—adult education, social and family services, preschool programs, etc. The school superintendent, Dana P. Whitmer, conceived the idea of a Human Resources Center that would pull all of these services together and become the focal point for reviving the community. He retained Urban Design Associates, a Pittsburgh-based planning and architectural firm, to examine the possibilities for such a center not only in the light of the needs for that one particular piece of the city but in relation to the development of Pontiac as a whole. The firm advocated locating the HRC closer to the center of town, as part of a civic complex that already includes the city hall, school department, and fire and police headquarters, and which may eventually include a cultural center as well. The civic center borders the ghetto area, but it is also one of the main activity generators for downtown Pontiac, a section of the city that was slowly being abandoned, especially by whites, as a place to live or do business. The Center, everyone hoped, could become a means of reviving not just the ghetto area but downtown Pontiac as well.

Not surprisingly, financing a Human Resources Center raised problems. Although the Pontiac School District has the fiscal independence to establish its own tax rate for schools and issue its own bonds for new facilities, there could be no guarantee that the bond issue would be approved by the school board and passed by the voters. Funds for the non-school portions of the Center were even more tenuous. None of the social agencies such as the community college, adult education agencies, social service and counseling groups, community groups, or the public library unit had building funds they could put into the HRC. Operational funds, perhaps, but facilities, no.

To get around this impasse, the planners of the HRC and officials from the schoolhouse construction branch of the U.S. Office of Education approached the U.S. Department of Housing and Urban Development for funds. HUD had never granted money to a school district; most of its funds were channeled into city administrations and were rarely used for the planning or construction of facilities associated with schools. So, the HRC team proposed that HUD make a major policy change and finance portions of the theater, preschool, kindergarten, gymnasium, vocational education, home economics, meeting room, and adult education spaces of the Center. After long negotiations, HUD changed its policy and made a $1.2-million grant to the Pontiac School District under the Neighborhood Facilities Act. But in the meantime, a further problem arose since Michigan law

prohibited local school districts from accepting federal funds for construction of a portion of a building. However, last fall the State legislature was persuaded to change the law and allow the HUD funds to pass directly to the Pontiac School District.

Thus, from the fiscal side, the HRC is a very odd but significant project—it is really joint occupancy between the Pontiac School District and the U.S. Department of Housing and Urban Development, and it is the first of its kind.

Another problem was the design of the Center itself. The primary function of the Center is to provide elementary school education for between 1,800 and 2,000 children. But the HRC is intended to be considerably more than an elementary school. It has been conceived as a child's city in which children go to school in an urban environment made up of many different kinds of activities, some adult, some child-centered.

The city effect is to be achieved with a street within the Center that cuts diagonally at the upper level where most of the adult and community-centered activities are located. This makes the Center accessible to the people of the neighborhood and improves the community orientation of the HRC.

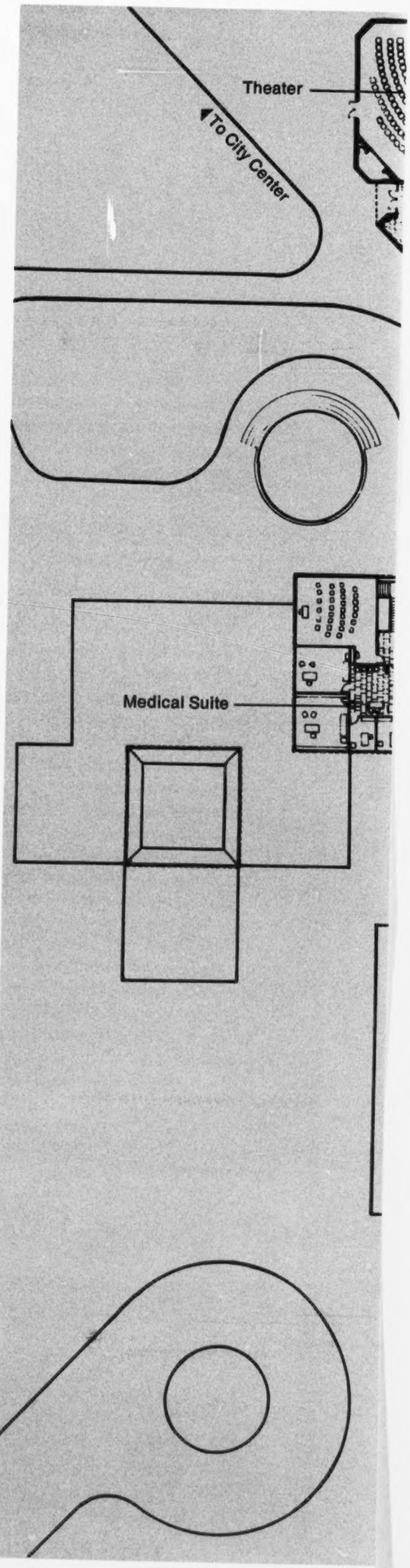
The school will operate on a nongraded, continuous progress plan combined with a form of team teaching. It also will divide the children into three levels—upper elementary, lower elementary, and kindergarten. Each of these schools will occupy its own wing while sharing centralized recreation space, a cafeteria, and an auditorium located at the upper level.

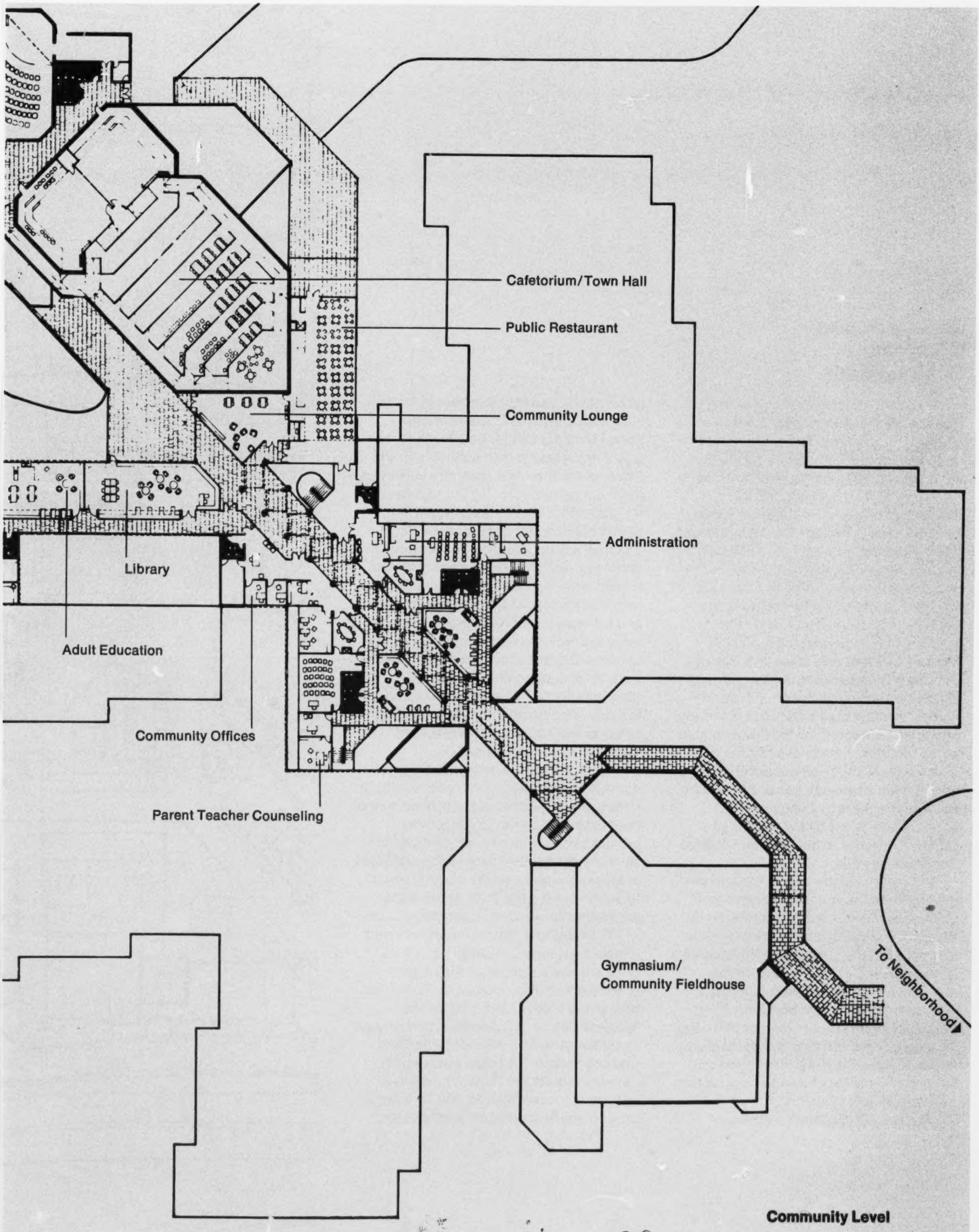
In physical and operational terms, the HRC is joint occupancy between a large elementary school and a variety of civic and social functions and agencies such as the county health and mental health groups, the Urban League, the Office of Economic Opportunity, the local community college, and community recreational and social organizations. Most of these groups pay no rent to HRC because they "serve people" and are nonprofit.

One or two small offices have been set aside in hopes that privately operated job centers (perhaps run by General Motors) might use them, thus adding a private business aspect to the Center. The HRC, however, is essentially a public-public mixture, owned and operated by the Pontiac School District. There will be no income from leasing air rights or land. In addition to HUD's $1.2 million, voters passed a $5 million bond issue for the Center, which should open in 1971.

This project, however, is economical in its use of land. By building community functions atop the school, the need for land, and thus the cost, is reduced by about half. So, although the HRC had to acquire and develop 14 acres at a cost of $500,000, it was saved from buying and then razing further local housing for the project.

While there has never been any intention that the HRC would pay for itself, money has been saved. But, perhaps much more important, Pontiac has been able to attempt a radically different kind of environment for a large number of white and black children.




Cafetorium/Town Hall
Public Restaurant
Community Lounge
Administration
Library
Adult Education
Community Offices
Parent Teacher Counseling
Gymnasium/
Community Fieldhouse
To Neighborhood
Community Level

Quincy School Complex Boston, Mass.

A slightly different version of the Pontiac idea is embodied in Boston's Quincy Complex, an environment that includes school, community facilities, services, stores, parking, and housing.

A new school was needed for Boston's downtown South Cove urban renewal area to replace the 120-year-old Quincy Elementary School which was the first American elementary school to grade children according to their age.

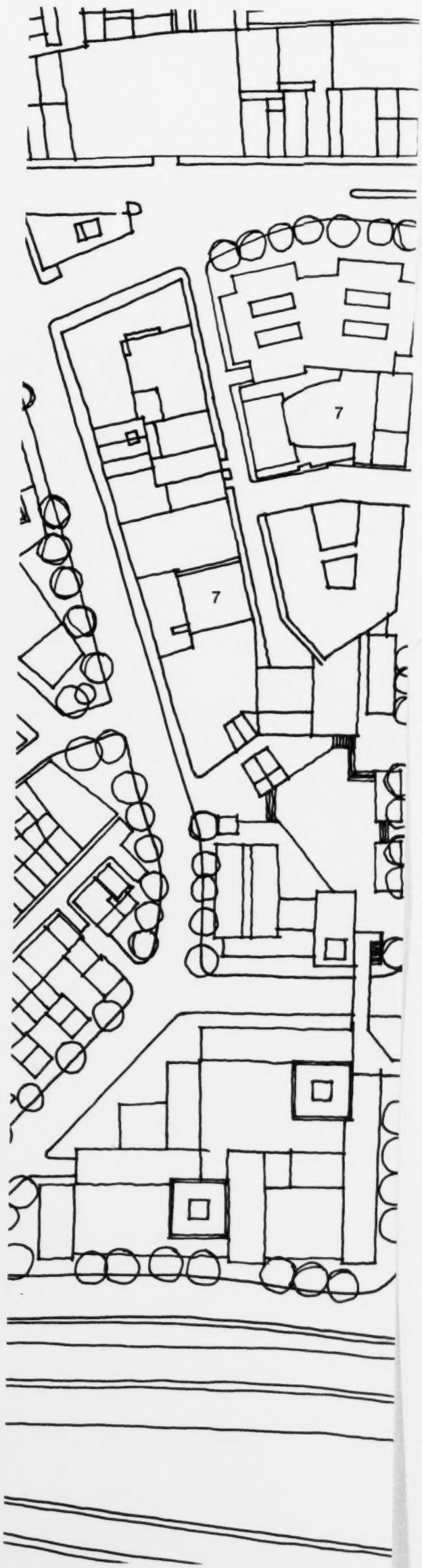
The South Cove area includes the Tufts-New England Medical Center, which is in the midst of reorganizing itself as a permanent downtown facility, the City's Chinese community, garment district, a section of restored Federal homes, and the theater district. So many agencies competed for the few available acres that land rose to over $7 per sq ft, which equals $300,000 per acre. Therefore, the land squeeze caused the urban renewal planners to assign only 2.5 acres to be shared by the proposed Quincy School with housing for Medical Center personnel.

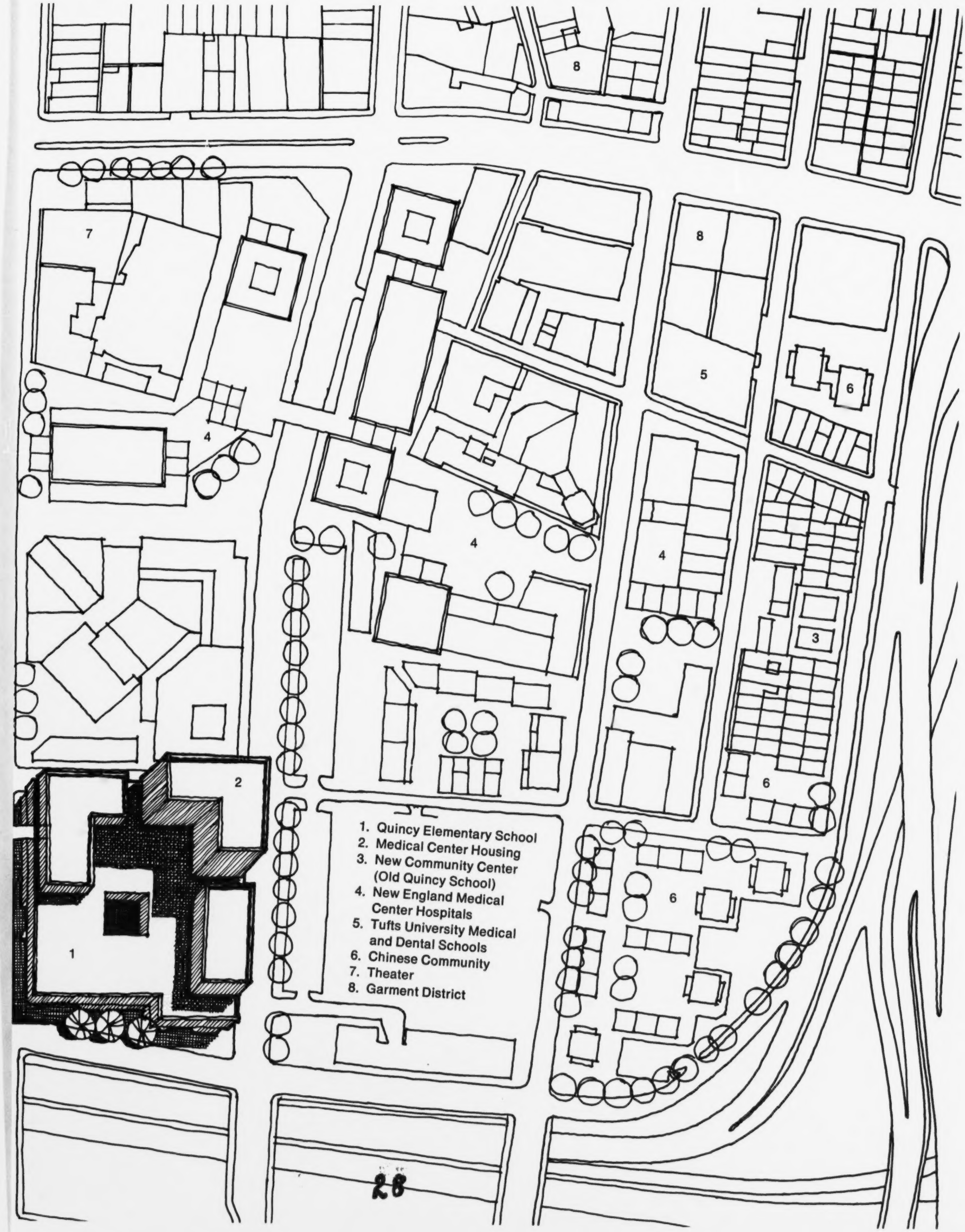
Since neither the school system nor the Medical Center had sufficient land for their own purposes, they conceived the idea of sharing a building with close ties between the school and the Medical Center, especially in the area of the schooling of physically handicapped and hospitalized children. Over the course of several years of joint planning, including the involvement of local communities, the idea grew into something beyond merely the sharing of a structure by a school and housing.

A survey of Medical Center employees showed that they would move back into the city and live in the proposed Medical Center housing if there was a first-class public school in South Cove. In addition, the planners surveyed the local community and found a need for such other facilities as recreation, health services for the elderly, a little city hall, a drop-in center for school dropouts, and a community information center. Although all of these activities might be located in the single school and housing structure, the planners believed they should not operate as distinct entities but should all be linked into a single operating environment. Beyond that, they should all also be linked to the surrounding community, providing easy access and acting as a kind of focus for the entire area.

The complex will be a private-public condominium constructed and owned by different institutions, some private, some public. Unfortunately, such public-private condominiums—or joint ownership of a single structure—were not legal in Massachusetts, so the planners had to put through a bill in the State legislature to change the condominium law.

The resulting plan in its present and almost final form is a single structure of 17 stories, 5 stories of mixed school and other facilities topped by 12 stories of married student housing for the Medical Center. At basement and ground level, the structure will house parking and community facilities, such as day care and health services. The school section is topped by a 25,000 sq ft playground shared by pupils and tenants.




1. Quincy Elementary School
2. Medical Center Housing
3. New Community Center (Old Quincy School)
4. New England Medical Center Hospitals
5. Tufts University Medical and Dental Schools
6. Chinese Community
7. Theater
8. Garment District

Developers of mixed-income housing financed community-school building and a shopping center (low buildings between highrise at left and walk-up apartments) with same federal mortgage terms obtained for the housing.

Drake-South Commons School Chicago, Ill.

On 30 acres of what used to be part of Chicago's South Side slum area, a private developer has attempted to create a racially and economically integrated housing development next to a low-income public housing project and a few blocks from the Illinois Institute of Technology.

The developers, James McHugh and Daniel Levin, obtained renewal rights to the area and sought ways to promote the desirability and stability of the community. In addition to providing parking and a shopping center, they decided to include facilities for a school, for a church, and for community activities. The housing project, which is now about half completed, will eventually house 1,406 families with moderate, middle, and high incomes. The moderate income housing was financed by HUD under Section 221 (d) (3) of the National Housing Act which gives a 20-year mortgage at 3 percent. In order to get the same favorable terms for the proposed community building housing a school and church, the developers agreed to sign over the profits of the proposed shopping center to support the community building. Because such a proposal had never been seen before, HUD had to amend the Housing Act before it could enter the agreement.

A community corporation was set up to own and run the community building, and the Chicago school system rents space from it for $2.25 per sq ft per year including maintenance. The space cost $28 per sq ft to construct including air conditioning.

Facilities in the building are shared. The ground level provides parking space for the tenants, while the two upper levels provide for a mixture of community, school, and church functions. The school uses the large gymnasium-playroom during the day; the community uses it for recreation at night. The room used by the church also is the school's auditorium or the community's social room.

30

Community building (far right) sits atop parking area which is shielded by concrete wall. A promenade surrounds the school located at one end, religious space at the other end, and meeting halls and offices in between.

Shopping center profits help finance community building in which Chicago school system rents space. Spaces serve double role: religious space is used as school auditorium, and school gym becomes community recreation room at night.

Summary

All the foregoing joint-occupancy ventures have had to overcome similar difficulties, and each has had to develop roughly the same kind of devices in order to succeed.

Each project, for instance, came about only as the result of long, often painful but always laborious, collaborative planning that often extended over a period of years. Joint occupancy requires the willingness of at least two parties to sit down and work out a long series of details, even if these two parties are not in the habit of collaborating with others. This is particularly true during a participants first joint-occupancy project; further projects become much easier.

One of the participants must serve as a single coordinating agent, for without this leadership there will probably not be joint occupancy. This central agent can have varying degrees of power; it can be a fiscally independent school board or an agency as powerful as the New York City Educational Construction Fund.

A third necessity is that the legal mechanisms must exist or be created to make joint occupancy possible. In Massachusetts and New York, the laws had to be changed. In Pontiac and Chicago, governmental regulations had to be altered. In the cases of Trinity and Friends Select Schools, new legal entities, new corporations, had to be formed. The legal problem always exists and must always be solved.

The concept of joint occupancy offers great benefits and advantages to all concerned. Everybody can win. Indeed, schools that pay for themselves may be the only kind of schools that many cities will be able to build.

The following reports are available without charge from the offices of Educational Facilities Laboratories, 477 Madison Avenue, New York, New York 10022.

A College in the City: An Alternative
A report of a new approach to the planning of urban campuses, with facilities dispersed through the community, designed to serve community needs and to stimulate community redevelopment. (1969)

Bricks and Mortarboards
A guide for the decision-makers in higher education: how the colleges and universities can provide enough space for burgeoning enrollments; how the space can be made adaptable to the inevitable changes in the educational process in the decades ahead. (One copy available without charge. Additional copies $1.00.) (1964)

Campus in the City
EFL's annual report for 1968 and an essay on the physical problems and trends in planning of urban colleges and universities and their potential role as a catalyst in the remaking of the cities.

College Students Live Here
A report on the what, why, and how of college housing; reviews the factors involved in planning, building, and financing student residences. (1962)

Design for ETV—Planning for Schools with Television
A report on facilities, present and future, needed to accommodate instructional television and other new educational programs. Prepared for EFL by Dave Chapman, Inc., Industrial Design. (1960) (Revised 1968)

Design for Paperbacks: A How-to Report on Furniture for Fingertip Access
Physical solutions to the problems of displaying paperback books for easy use in schools. (1968)

Educational Change and Architectural Consequences
A report on school design that reviews the wide choice of options available to those concerned with planning new facilities or updating old ones. (1968)

The Impact of Technology on the Library Building
A position paper reporting an EFL conference on this subject. (1967)

Relocatable School Facilities
A survey of portable, demountable, mobile, and divisible schoolhousing in use in the United States and a plan for the future. (1964)

The Schoolhouse in the City
An essay on how the cities are designing and redesigning their schoolhouses to meet the problems of real estate costs, population shifts, segregation, poverty, and ignorance. (1966)

The School Library: Facilities for Independent Study in the Secondary School
A report on facilities for independent study, with standards for the size of collections, seating capacity, and the nature of materials to be incorporated. (1963)

School Scheduling by Computer/ The Story of GASP
A report of the computer program developed by MIT to help colleges and high schools construct their complex master schedules. (1964)

SCSD: The Project and the Schools
A second report on the project to develop a school building system for a consortium of 13 California school districts. (1965)

Transformation of the Schoolhouse
A report on educational innovations in the schoolhouse during the last decade. With financial data for the year 1968. (1969)

Profiles of Significant Schools:

A series of reports which provide information on some of the latest developments in school planning, design, and construction.

Schools Without Walls
Open space and how it works. (1965)

Three High Schools Revisited
Andrews, McPherson, and Nova. (1967)

Middle Schools
Controversy and experiment. (1965)

On the Way to Work
Five vocationally oriented schools. (1969)

The Early Learning Center
A Stamford, Conn. school built with a modular construction system provides an ideal environment for early childhood education. (1970)

Case Studies of Educational Facilities:

A series of reports which provide information on specific solutions to problems in school planning and design.

8. The Schools and Urban Renewal
A case study of the Wooster Square renewal project in New Haven, Connecticut. (1964)

9. Air Structures for School Sports
A study of air-supported shelters as housing for playfields, swimming pools, and other physical education activities. (1964)

10. The New Campus in Britain: Ideas of Consequence for the United States
Recent British experience in university planning and its implications for American educators, architects, and planners. (1965)

11. Divisible Auditoriums
Operable walls convert little-used auditoriums and theaters into multipurpose, highly utilized space for the performing arts and instruction. (1966)
12. The High School Auditorium: Six Designs for Renewal
Renovation of little-used auditoriums in old and middle-aged schools to accommodate contemporary educational, dramatic, and music programs. (1967)
13. Experiment in Planning an Urban High School: The Baltimore Charette
A two-week meeting enabled community people to tell educators and planners what they expect of a school in a ghetto. (1969)

Technical Reports:

1. Acoustical Environment of School Buildings
Acoustics of academic space in schools. An analysis of the statistical data gathered from measurement and study. (1963)
2. Total Energy
On-site electric power generation for schools and colleges, employing a single energy source to provide light, heat, air conditioning, and hot water. (1967)
3. 20 Million for Lunch
A primer to aid school administrators in planning and evaluating school food service programs. (1968)
4. Contrast Rendition in School Lighting
A discussion of requirements for school lighting, with 18 case studies. (1970)
5. Instructional Hardware: A Guide to Architectural Requirements (1970)

College Newsletter:

A periodical on design questions for colleges and universities.

Films:

The following films have resulted from EFL-funded efforts and are available for loan or purchase as indicated:
To Build a Schoolhouse
A 28-minute color film outlining the latest trends in school design. Available on loan without charge from EFL in care of Association Films, Inc., 600 Madison Avenue, New York, N.Y. 10022, and for purchase at $93.45 from EFL.
Room to Learn
A 22-minute color film on The Early Learning Center in Stamford, Connecticut, an open-plan early childhood school with facilities and program reflecting some of the best current thinking. Prepared by The Early Learning Center under a grant from EFL and available on loan without charge from Association Films, Inc., 600 Madison Avenue, New York, N.Y. 10022, and for purchase at $125.00 from The Early Learning Center Inc., 12 Gary Road, Stamford, Conn.
A Child Went Forth
A 28-minute color film on inner-city and ghetto schools and school building problems. Available on loan without charge from Modern Talking Picture Service, Inc., 2323 New Hyde Park Road, New Hyde Park, Long Island, New York 11045 or for purchase at $75 from The Library, American Institute of Architects, 1735 New York Avenue, N.W., Washington, D.C. 20006. A 45-minute version is available for purchase from Larry Madison Productions, Inc., 253 E. 49 Street, New York, N.Y. 10017.

Credits:
Designed by Jarrin & Levitan Associates in Design
Illustrations by Juri Kirsimagi
Photographs by George Zimbel
Printed by Herst Litho Inc.

37